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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,629	12/12/2001	Wilhelm Rademacher	50061	9694
26474 7590 05/18/2009 NOVAK DRUCE DELUCA + QUIGG LLP 1300 EYE STREET NW SUITE 1000 WEST TOWER WASHINGTON, DC 20005				
EXAMINER				
PRYOR, ALTON NATHANIEL				
ART UNIT		PAPER NUMBER		
1616				
MAIL DATE		DELIVERY MODE		
05/18/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/009,629

Applicant(s)

RADEMACHER ET AL.

Examiner

ALTON N. PRYOR

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7, 9-12 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7, 10-12 and 15-22 is/are rejected.
- 7) ☐ Claim(s) 3, 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's arguments filed 2/5/09 have been fully considered but they are not persuasive. See argument below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4,7,10-12,15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motojima et al (USPN 4866201; 9/12/89). Motojima et al suggests a method of regulating the growth of orchards comprising applying to the orchards (fruit trees) a composition comprising instant compounds of formula I. See abstract, column 20 lines 50-63. Motojima et al does not teach an invention comprising citrus fruit trees or an invention comprising increasing amounts of flavonoids and other phenolic compounds. Note that orchards are fruit trees. Also note the step of applying the compound of formula I to the fruit tree in the claim is also carried out by Motojima which makes it obvious that the flavonoids and other phenolic compounds would increase in the orchards of Motojima. Motojima et al. does not specify the fruit trees listed in the claims. However, absent a showing of unexpected results for specific fruit trees, it would have been obvious to expect that the application of the compounds to any fruit tree, including those instantly claimed, would have resulted in the regulation of the tree's growth. Motojima et al. teaches the application of the compound to the undergrowth

grasses rather than directly to the actual orchard plants. Applicant provided abstracts of Derr and Ahrens to demonstrate that the application of a chemical to undergrowth grasses does not include the chemical's application to the actual plant (orchard). The Examiner agrees that Motojima et al does exemplify the application of the chemical to the undergrowth grasses in orchards at column 20 lines 50-63. However, at column 20 lines 30-37, Motojima et al. teaches the application of the chemical to foliage which would include orchard foliage. The teaching , at column 20 lines 30-37 would have made it obvious to apply the chemical to the foliage of any plant including the orchard plants claimed in order to regulate their growth.

Response to Applicants' argument

Applicants argue:

- 1) Motojima et al does not teach a method of increasing the flavonoid content of a plant.
- 2) Motojima et al teaches that the compound to their formula may be used to treat various/numerous locations including undergrowth grasses (non-crop land) in orchards. In order to arrive at the Applicants' invention one would have to select treating the location of undergrowth grasses in orchards from the numerous locations disclosed in Motojima et al. Motojima et al is not to specific orchards such as cherries, plums and sloes to be treated using a specific compound of formula I as recited in instant claims.
- 3) Motojima et al. teaches the application of the compound to the undergrowth grasses rather than directly to the actual orchard plants. Applicant provided abstracts of Derr and Ahrens to demonstrate that the application of a chemical

to undergrowth grasses does not include the chemical's application to the actual plant (orchard).

The Examiner argues:

The step of applying the compound of formula I to the fruit tree in the claim is also carried out by Motojima et al which makes it obvious that the flavonoids and other phenolic compounds would increase in the orchards of Motojima et al. The claims are specific to treating specific types of fruit trees (orchards), whereas Motojima et al is to treating orchards broadly. Note, no data have been provided by the Applicants' demonstrating that the treatment of different orchards with a compound of formula I would render unobvious results. Motojima et al teach orchards broadly which encompass the specific orchards of the claims. With respect to specific compounds of the formula disclosed by Motojima et al, Motojima et al teaches the use of many compounds (see Table 1) that are equivalent to the compounds of formula I which are embraced by the instant claims. The Examiner agrees that Motojima et al does exemplify the application of the chemical to the undergrowth grasses in orchards at column 20 lines 50-63. However, at column 20 lines 30-37, Motojima et al. teaches the application of the chemical to foliage which would include orchard foliage. The teaching, at column 20 lines 30-37 would have made it obvious to apply the chemical to the foliage of any plant including the orchard plants claimed in order to regulate their growth.

Further Response to Applicants' Amendment filed 2/5/05

The Applicants argue that the Examiner's reason for rejecting instant claims are no longer valid since none of the plants in the amended claims fall within the realm of fruit trees. Applicants further argue that Motojima et al. further disclose the treatment of undergrowth grasses in orchards. The Examiner argues that Motojima et al. at column 20 lines 30-37 suggest the application of the phenolic compounds to plant foliage broadly (this teaching would include the foliage of the instant plants).

The Applicants argue that Motojima et al. at column 20 lines 20-37 emphasize that the manner of treatment pertains to control of internode elongation of cereals and the prevention or reduction of lodging of particular plants. The Examiner argues that active step, i.e. the application of the phenolic compounds to plant foliage, is the same in both Motojima et al. and the instant claims; therefore, it is inherent that both Motojima et al. and instant invention would produce the same results.

Claim Objection / Allowable Subject Matter

Claims 3,9,14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 6 is allowable. Unexpected data for grape plants are on pages 9-11.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Alton N. Pryor/
Primary Examiner, Art Unit 1616